

VYGODSKIY, Mark Yakovlevich; BELYAYEVA, V.N., red.; RYVKIN, A.Z., red.;
AKHLAMOV, S.N., tekhn. red.

[Handbook on higher mathematics] Spravochnik po vysshei matematike.
Izd.6., dop. i ispr. Moskva, Gos. izd-vo fiziko-matem. lit-ry,
1962. 870 p. (MIRA 15:6)
(Mathematics--Handbooks, manuals, etc.)

ROMASHOV, D.D.; NIKOLYUKIN, N.I.; BELYAYEVA, V.N.; TIMOFEYeva, N.A.

Possibility of obtaining diploid gynogenesis in sturgeons by
radiation. Radiobiologiya 3 no.1:104-110 '63. (MIRA 16:2)

1. Institut biologicheskoy fiziki AN SSSR, Moskva, i Saratovskoye
otdeleniye gosudarstvennogo nauchno-issledovatel'skogo instituta
ozernogo i rechnogo rybnogo khozyaystva.

(EMBRYOLOGY---FISHES) (RADIATION---PHYSIOLOGICAL EFFECT)

BELYAYEVA, V.N.; NIKONOROV, I.V.

Causes of the attraction of fishes by light. Vop. ikht. 1 no.3:
513-518 '61. (MIRA 14:11)

1. Kaspiyskiy nauchno-issledovatel'skiy institut morskogo
rybnogo khozyaystva i okeanografii - KaspNIRO.
(Caspian Sea--Electric fishing)
(Light--Physiological effect)

ROMASHOV, D.D.; GOLOVINSKAYA, K.A.; BELYAYEVA, V.N.; BAKULINA, E.D.
POKROVSKAYA, G.L.; CHERFAS, N.B.

Radiation-induced diploid gynogenesis in fishes. Biofizika 5
no. 4:461-467 '60. (MIRA 13:12)

1. Institut biologicheskoy fiziki AN SSSR, Moskva i Institut
prudovogo rybnogo khozyaystva RSFSR, Moskva.
(EMERYOLOGY--FISHES) (X RAYS--PHYSIOLOGICAL EFFECT)
(FERTILIZATION (BIOLOGY))

BELIAYEVA V.
ROMASHOV, D.D.; BELIAYEVA, V.N.

Food specialization in different species of Rhynchaenini (Coleoptera, Curculionidae) [with summary in English]. Zool. zhur. 37 no.2:210-214
P. '58. (MIRA 11:3)

1. Zoologicheskii muzey Moskovskogo gosudarstvennogo universiteta.
(Moscow Province--Weevils) (Trees--Diseases and pests)

BELYAYEVA, V.N.

"On the Variation of Wing Venation in Populations of the House Fly *Musca Domestica* L.," Dok. AN, 54, no. 9, 1946

BELYAYEV, V.N.

"In the Selective Value of Different Variations in Wing Venation in the Natural Populations of *Drosophila Melanogaster*," Dok. AN, 54, no. 8, 1946

BELYAYEVA, V.N.

Variations in wing venation in natural populations of *Drosophila melanogaster*
Dok. AN, 54, no.7, 1946

BELYAYEVA, V.N., zasluzhennaya uchitel'nitsa.

Developing the concept of plantcell structure. Est. v shkole no.5:32-36 S-O '56. (MLBA 9:10)

1. Srednyaya shkola no.610 g. Moskvyy.
(Plant cells and tissues)

BEIYAYEVA, V.N., zasluzhennaya uchitel'nitsa shkoly.

Concept of the cell structure of plants. Est.v shkole no.4:28-33
Jl-Ag '56. (MIRA 9:9)

1.Srednyaya shkola No.610, goroda Moskvyy.
(Plant cells and tissues)

BELYAYEVA, V.N., inzh.

Power supply to the auxiliary machines of a.c. electric trains from
a phase splitter. Trudy LIIZHT no.176:61-69 '61. (MIRA 15:5)
(Electric railroads--Current supply)

BELYAYEVA, V.N., inzh.; GLUKHOV, I.V., inzh.

Commutation testing of PK-301 contactors with labyrinth-slot
chambers. Sbor. LIIZHT no. 159:165-169 '58. (MIRA 12:2)
(Electric contactors--Testing)

BELYAYEVA, V.N.; MERTSALOVA, O.B.; PASHKOV, Z.D.

Use of the mean quadratic temperature departure and the height of
isobaric surfaces in aeroclimatology. Trudy NIIAK no.16:20-27
'62. (MIRA 15:11)
(Meteorology)

BELYNEVA, V.M.

USSR / General Division, Problems of Teaching

A-8

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 18940

Author : Bely^yneva V. M.

Inst : _____

Title : The Development of an Understanding of the Cell
Structure of Plants (Vth Class)

Orig Pub: Estestvozn. v. shkole, 1956, No 4, 28-33

Abstract: No abstract

Card 1/1

BELYAYEVA, V. L., CAND BIO SCI, "HEMOPOIESIS IN ~~THE PRE-~~
~~SENCE OF~~ VISCERAL LEISHMANIASIS ^{of} DOGS. SAMARKAND, 1960.
(TASHKENT STATE UNIV IM V. I. LENIN). (KL, 2-61, 203).

Country : USSR
 Category : Human and Animal Physiology, Blood
 Abs. Jour. : Ref Zhur - Biol., No. 2, 1959, 7895

Author :
 Instit. :
 Title :

Orig Pub. :

Abstract : of lymphocytes were seen; similar changes were observed in the lymph nodes. Extramedullary foci of hematopoiesis arose in the spleen. Erythrophagocytosis, macrophages with hemosiderin and lymphopenia and eosinopenia in the peripheral blood were observed. In far-gone cases of leishmaniasis, there was a considerable rise in the sedimentation rate (up to 70--80 mm per hour in 15% of the animals).--I.I.Yurovskaya

Card: 3/3

Country : USSR
Category : Human and Animal Physiology, Blood
Doc. No. : Ref Zhur - Biol., No. 2, 1969, 7895
Author :
Instit. :
Title :

T

Orig. No. :

Abstract : and erythrocyte counts were noted in the peripheral blood, as well as anisocytosis, poikilocytosis and polychromasia; up to 5--6 normoblasts were found per 500 erythrocytes. The white cell picture showed an increased number of band cells and up to 1--3% giant, hypersegmented elements. The total number of leukocytes in the blood remained within normal limits. In the spleen there was an increase in the percentage of plasma, reticuloendothelial, monocytic and sinusoidal cells, and degenerative forms

Card: 2/3

Country : USSR
 Category : Human and Animal Physiology, Blood
 Abstr. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7895
 Author : Polyayeva V.I.
 Institut. : The Uzbekistan Institute of Malaria and Medical Parasitology
 Title : Hematopoiesis in Dogs with Kala-azar.
 Orig. Pub. : Tr. Uzbekist. in-ta malyarii i med. parazitol., 1956, 2, 277--292
 Summary : Peripheral blood, bone marrow, spleen and sub-maxillary lymph nodes of 70 dogs with leishmaniasis were examined for periods of 4 to 8 months and 1 to 2 years. In the initial phases of kala-azar hematopoiesis was regenerative. As the illness progressed, there was an increase in qualitatively deficient hematopoiesis, a decrease in the production of erythroid elements, a disturbance in the hemoglobinization of erythrocytes and in the differentiation of myelocytes. Diminished hemoglobin levels

Card: 1/3

BELYAYEVA, V.L.

Costal puncture as a method for studying canine bone marrow in vivo. Med. paraz. i paraz. bol. no.2:172 Ap-Je '54. (MLRA 7:8)

1. Iz Uzbekskogo instituta malyarii i meditsinskoy parazitologii (dir. instituta prof. L.M.Isayev)

(BONE MARROW,

*rib puncture in vital study of bone marrow in dog)

(PUNCTURE,

*rib, in vital study of bone marrow in dog)

(RIBS,

*puncture in vital study of bone marrow in dog)

ACC NR: AP6036845

$g = 1/3 (g_{\parallel} + 2g_{\perp})$, the value $g_{\perp} = 1.955$ was obtained. Causes of the variation of g factors in the series of halide complexes of molybdenyl are discussed. This variation can be accounted for only by considering spin-orbital interactions on the ligand and the contribution of the electron transitions from bonding orbitals. The paper was presented by Academician Vinogradov, A. P., 14 May 66. Orig. art. has: 3 figures, 2 tables and 2 formulas.

SUB CODE: 07/ SUBM DATE: 14 May 66/ ORIG REF: 005/ OTH REF: 004
20/

Card 2/2

ACC NR: AP6036845

SOURCE CODE: UR/0020/66/171/002/0385/0388

AUTHOR: Marov, I. N.; Dubrov, Yu. N.; Belyayeva, V. K.; Yermakov, A. N.

ORG: Institute of Geochemistry and Analytical Chemistry im. V. I. Vernadskiy, Academy of Sciences, SSSR (Institut geokhimii i analiticheskoy khimii Akademii nauk SSSR)

TITLE: Electron paramagnetic resonance of the iodide complex of Mo(V)

SOURCE: AN SSSR. Doklady, v. 171, no. 2, 1966, 385-388

TOPIC TAGS: molybdenum compound, EPR spectrum, iodide

ABSTRACT: The EPR spectrum of the iodide complex of Mo(V) was studied with an RE-1301 spectrometer at ~9000 Mc. In all cases, EPR signals with $g = 2.058 \pm 0.004$ were obtained. A study of the influence of various methods of preparation of the complex, concentration dependence and formation of mixed complexes (HI + HCl, HI + HBr) showed that the line with $g = 2.058$ belongs indeed to the iodide complex of Mo(V), which has the same composition and structure as other halide complexes of Mo(V). Thus, the g factor of the iodide complex is greater than that of the free electron, this being very unusual for ions with a single d electron. An attempt was made to obtain more detailed information on g factors by studying the EPR spectra of the iodide complex of Mo(V) at 77°K; the values $g_1 = 2.258 \pm 0.005$ and $g_2 \approx 1.97$ were thus obtained. By using the average value of the g factor, g_1 and the relation

Card 1/2

UDC: 541.67+546.77+538.113

RYABCHIKOV, D.I. [deceased]; MAROV, I.N.; DUBROV, Yu.N.; BELYATEVA, V.K.;
YERMAKOV, A.N.

Stopped complex-forming reactions studied by the electron
paramagnetic resonance method. Dokl. AN SSSR 166 no.3:623-
626 Ja '66. (MIRA 19:1)

1. Institut geokhimii i analiticheskoy khimii im. V.I.
Vernadskogo AN SSSR. Submitted July 19, 1965.

RYABCHIKOV, D.I. [deceased]; MAHUV, I.M.; FURMAN, Ya.M.; BELYAYEVA, V.K.;
YEMNIKOV, A.N.

Electron paramagnetic resonance of malvidan complex compounds.
Dokl. AN SSSR 165 no.4:842-844 D '65.

(MIRA 18:12)

1. Institut geokhimi i prikladnoy khimii im. V.I.
Veradniskogo AN SSSR. 2. Chlen-korrespondent I.N. Sotl. (for
Ryabchikov).

YERMAKOV, A.N.; MAROV, I.N.; BELYAYEVA, V.K.; KAZANSKIY, L.P.

State of hafnium oxychloride in aqueous solutions. Zhur. neorg.
khim. 9 no.10:2354-2358 O '64.

(MIRA 17:12)

L 9803-66

ACC NR: AT5026383

2
of complexing of ions of zirconium and hafnium with inorganic and organic ligands. The behavior of these elements in sulfate, nitrate, and chloride solutions are studied. Oxalic acid, several carbonic and hydroxycarbonic acids, and other complexes were extracted from the organic substances. The authors used the ion exchange method to determine the compositions and the stability constants. Soviet ionites (KU-2 cationite and the EDE-10P anionite)¹⁵ were used in the experiments. Orig. art. has: 8 figures and 11 tables.

SUB CODE: 07 / SUBM DATE: 05Jul65 / ORIG REF: 030 / OTH REF: 032

Card 2/2

L 9803-66 EWT(m)/ETC/EPF(n)-2/EWG(m)/EWP(j)/T/EWP(t)/EWP(b) LJP(c) DS/JD/WW/JG/
 ACC NR: AT5026383 GS/RM SOURCE CODE: UR/0000/65/000/000/0294/0311 70

AUTHOR: Yermakov, A. N.; Marov, I. N.; Belyayeva, V. K.; Ryabchikov, D. I. 68
 (Corresponding member AN SSSR) 55 55 B+1

ORG: None

TITLE: Study of the complexing of zirconium and hafnium in solutions by the ion exchange method 27 27 55

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii. ⁵⁵ Sovremennyye metody analiza; metody issledovaniya khimicheskogo sostava i stroyeniya veshchestv (Modern methods of analysis; methods of investigating the chemical composition and structure of substances), 294-311

TOPIC TAGS: zirconium, hafnium, zirconium compound, hafnium compound, ion exchange, chemistry technique, analytic chemistry

ABSTRACT: Despite the growing interest in the chemistry of zirconium and hafnium, few studies have been performed on their complexing with organic and inorganic substances. There are only few determinations of the composition and stability constants of complex compounds of zirconium, and no analogous data for hafnium. New methods of investigation have made possible a more thorough approach to the study of processes of complexing of zirconium and hafnium with various substances in solutions. The present review article gives the results of some of the experiments conducted by the authors on the equilibrium reactions

Card 1/2

UDC: 543.06

L 13505-63

ACCESSION NR: AF3003474

and aging conditions of the solution. The diffusion coefficients of the salts of $ZrOCl \cdot 2.8H_2O$, $HfOCl \cdot 2.8H_2O$, and $ThCl_4$ were determined. The electrical conductivity of zirconium oxychloride solutions was measured at 0.2, 10 and 25° in concentration range of 0.0617-0.3868 mol/l. Obtained results shown that products of slight molecular weight exist in zirconium oxychloride solutions. "The authors express their gratitude to D. I. Ryabohikov, V. O. Shpikiter, D. I. Leykis, O. L. Kabanova, V. V. Fomin and Yu. M. Kesler for valuable suggestions and help in the work." Orig. art. has: 5 figures and 6 tables. 7

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. B. I. Vernadskogo, Akademii nauk, SSSR (Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 14Sep62

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: CH

NO REF SOV: 009

OTHER: 020

Card 2/2

L 13505-63 EMP(q)/EWI(m)/BDS AFPTC/ASD JD/JG

ACCESSION NR: AP3003474

8/0078/63/008/007/1623/1633

AUTHOR: Yermakov, A. N.; Marov, I. N.; Belyayeva, V. K.

TITLE: Properties of aqueous solutions of zirconium oxychloride

63
56

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 7, 1963, 1623-1633

TOPIC TAGS: zirconium, zirconium oxychloride, potentiometry, cryoscopy

ABSTRACT: The authors studied the condition of zirconium in aqueous solutions of $ZrOCl_2 \cdot 8H_2O$ by potentiometric, cryoscopic, and electric conductivity methods, and by measuring the diffusion rate. Purpose of study was to obtain information concerning hydrolysis and degree of polymerization of this compound. $ZrOCl_2 \cdot 8H_2O$, thrice recrystallized from a commercial chloride solution, was used for the study. The composition of the compound corresponded precisely to the formula. The solutions to be tested were prepared by dissolving a weighed portion of the salt in distilled water which was chilled to $3-4^\circ$. The solutions were kept at this temperature for 24 hours. In all cases, each experiment was repeated no less than two times. Authors determined the activity of hydrochloric acid in zirconium oxychloride solutions at 0.2, 10, and 25° in concentration ranges of 0.006-0.38 mol/kg. The drops in the freezing points of the zirconium oxychloride solutions were measured in relation to salt concentration

Card 1/2

Application of ion exchange ...

S/078/62/007/001/001/005
B119/B110

Amer. Chem. Soc., 77, 3180 (1955); J. C. Sullivan, J. C. Hindman. J. Amer.
Chem. Soc., 76, 593 (1954); B. A. I. Lister. J. Chem. Soc. (11), 3123
(1951).

SUBMITTED: January 3, 1961

Card 3/3

Application of ion exchange ...

S/078/62/007/001/001/005
B119/B110

constants of the complexing reactions were calculated by methods of Fronaeus and Schubert.

$$K_j = \frac{[M(SO_4)_j]^{4-2j} [H^+]^j}{[M^{4+}] [HSO_4^-]^j} \quad \text{Values for Zr: } K_1 = 361 \pm 12,$$

$$K_2 = (2.17 \pm 0.15) \cdot 10^3, K_3 = (4.06 \pm 1.2) \cdot 10^5; \text{ for Hf. } K_1 = 130 \pm 6.$$

$K_2 = (2.09 \pm 0.1) \cdot 10^3$. It has been found that the complex $M(SO_4)_2^{2+}$ is absorbed by the cation exchanger KY-2 (KU-2) within the limits of error. Mention is made of papers by V. F. Saksin (Ref. 4: Nauchn. dokl. vysshey shkoly. Khimiya i khim. tekhnologiya no. 1.75 (1959)), A. K. Kirakesyan, I. V. Tananayev (Ref. 5: Zh. neorgan. khimii, 4, 852 (1959)), Ye. P. Mayorova, V. V. Fomin (Ref. 11: Zh. neorgan. khimii, 2, 1937 (1958)). There are 6 figures, 4 tables, and 12 references: 5 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: E. L. Zebroski, H. W. Alter, F. K. Neumann, J. Amer. Chem. Soc., 76, 5646 (1954); R. A. Day, R. N. Wilhite, F. D. Hamilton, J.

Card 2/3

S/078/62/007/001/001/005
B119/B110

AUTHORS: Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I. N., Yao K'o-min

TITLE: Application of ion exchange for studying the complex formation of zirconium and hafnium with sulfate ion

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 1, 1962, 69-75

TEXT: The experimental part of the present paper was carried out by the method described in Refs. 8 and 9 (Ref. 8: D. I. Ryabchikov, A. N. Yermakov, V. K. Belyayeva, I. N. Marov, Zh. neorgan. khimii, 4, 1814 (1959); Ref. 9: The same authors, Zh. neorgan. khimii, 5, 1051 (1960)). Anion exchanger 3AD-10N (EDE-10P) and cation exchanger KJ-2 (KU-2) were used. The complex formation of Zr and Hf with sulfuric acid was examined by cation exchange in chloric-acid solution with a hydrogen-ion concentration of $[H^+] = 2.33$ moles/l. At sulfuric-acid concentrations of up to 0.1 mole/l, three complexes form with Zr, which correspond to the ratios of metal : $H_2SO_4 = 1 : 1$, $1 : 2$, and $1 : 3$. Hf forms two complexes

corresponding to metal : $H_2SO_4 = 1 : 1$ and $1 : 2$. The equilibrium

Card 1/3

S/078/60/005/012/016/016
B017/B064

AUTHORS: Marov, I. N., Belyayeva, V. K., Yermakov, A. N., and
Ryabchikov, D. I. ✓ ✓

TITLE: Chromatographic Separation of Zirconium and Hafnium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12,
pp. 2844-2847

TEXT: A new method of separating zirconium and hafnium by means of the KY-2 (KU-2) cationite was developed. A solution of 0.025 mole citric acid and 1 mole perchloric acid, or 1 mole nitric acid, was used as desorbent. The rate of desorption is 0.5 - 0.6 ml/min·cm². Zirconium and hafnium were radiometrically analyzed in the extracts with the isotopes Zr⁹⁵ and Hf¹⁸¹. Fig. 1 shows the curves for the chromatographic distribution of Zr⁹⁵ (+Nb⁹⁵) and Hf. It was found that with an increased loading of the cationite the value V_{max} rises, and the ratio

$V_{max}^{Hf}/V_{max}^{Zr}$ decreases. This effect is explained by the formation of polynuclear zirconium complexes, and the effect of the large zirconium
Card 1/2 ✓

Complex Formation of Zirconium and Hafnium With Some Hydroxy Acids

65996 69536

S/078/60/005/05/11/037
B004/B016

Figs. 1-5 show the change of K_d in dependence on the concentration of the organic acid. $K_{d,Zr}$ is always smaller than $K_{d,Hf}$. For citric acid, $\alpha = 4$. The separation of Zr and Hf by means of KU-2 cation exchangers by elution with 1M HClO₄ and 0.0256 M citric acid is based thereupon, as suggested and described by the authors. Fig. 6 shows the yield curves of the chromatographically separated complexes of Zr and Hf, which were identified by measuring their peaks by means of a γ -spectrometer (Fig. 7). This was carried out by G. A. Chernov. Figs. 8-11 show the dependence of $1/K_d$ on the concentration of the complexing substance. The authors determined the number of coordinate groups for the Zr and Hf complexes with the organic acids (Figs. 12-15). Table 6 presents the data for the adsorption of Hf onto the EDE-10p anion exchanger. The formation coefficients of the complexes are given in Table 7. The authors discuss the structure of the complex compounds. As may be seen from Table 8, dicarboxylic acids (succinic acid) do not form complex compounds, hydroxy-dicarboxylic acids, however, do. This is indicative of the participation of both carboxyl and hydroxyl groups in the complex formation. The stability of the complex compounds of Zr and Hf decreases in the following order: Oxalic acid > mesoxalic acid > trihydroxy-glutaric acid > citric acid > lactic acid > tartaric acid > malic acid. There are 15 figures, 8 tables, and 3 Soviet references.

SUBMITTED: July 30, 1959
Card 2/2

5.2200

~~6455~~ 69536S/078/60/005/05/11/037
B004/B016AUTHORS: Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I. N.TITLE: Complex Formation of Zirconium and Hafnium With Some Hydroxy Acids

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 5, pp. 1051-1067

TEXT: The authors intended to investigate the stability of the complex compounds of Zr and Hf with various organic acids, and, in the case of differences in their stability, the development of a method of separating these two elements. G. A. Yevtikova took part in this investigation. The authors describe the reagents applied (tartaric acid, citric acid, malic acid, trihydroxy-glutaric acid, HClO_4 , $\text{ZrOCl}_2 \cdot 8\text{H}_2\text{O}$, $\text{HfOCl}_2 \cdot 8\text{H}_2\text{O}$, cation exchangers of the KU-2 type, anion exchangers of the EDE-10p type). Zr^{95} and Hf^{181} were used as tracers. Preliminary experiments indicated that dicarboxylic acids (glutaric, glutamic, succinic, malonic, maleic, and fumaric acid) do not form complexes with Zr or Hf, whereas the afore-mentioned hydroxy acids (and the mesoxalic acid) change the distribution of Zr and Hf even in strongly acid media by the formation of stable complexes. Tables 1-5 give the experimental data for the five hydroxy acids in the presence of 0.125, 0.5, 1, and 2 M HClO_4 , and the partition coefficients K_d as well as the separation factor $\alpha = K_{d\text{Hf}} / K_{d\text{Zr}}$.

Card 1/2

BELYAYEVA, V.K.

PART I BOOK EXPLANATION 80/1443

Akademika nauk SSSR. Kemiya po analizu: knizhki

Metody opredeleniya prikladnykh i chistykh metallakh (Methods of Determining Alloys in Pure Metals). Moscow, 1960. 411 p. (Series: Itogi nauki, 12) 3,500 copies printed.

Kasp. Ed.: A.P. Vlasovskiy, Akademik, and D.I. Ryndolov, Doctor of Chemical Sciences, Ed. of Publishing House: M.P. Polyakov, Tech. Ed.: I.V. Polyakov, Ed.: I.V. Polyakov. This collection of articles is intended for chemists, metallurgists, and engineers.

CONTENTS: The articles describe methods for detecting and determining various elements in alloys and pure metals. The methods are based on the use of various analytical instruments, including X-ray fluorescence spectrometers, atomic absorption spectrometers, and infrared spectrometers. The methods have been developed within the last five or six years by various Soviet scientific institutions, and are now widely used in research and factory laboratories of the Soviet Union. No personalities are mentioned. References, mostly Soviet, accompany each article.

Mikhailov, S.G., and S.M. Solodovnik. Analysis of Bismuth for Determining Alloys 172

Krasn. L.G., A.G. Karabash, M. I. Poryvalov, V.M. Lipovskiy, and V.S. Golitsyn. The Spectrometric Method of Determining Alloys in Metallic Bismuth and Its Compounds 175

Shteynberg, S.I., and Ye.K. Golitsyn. Determination of Small Quantities of Lead in Metallic Bismuth 187

Shteynberg, S.I., and L.A. Tsvetkov. Determination of Alloys of Cadmium, Silver, and Gold in Metallic Bismuth with the Aid of Bismuth 191

Krasn. L.G., and Ch.I. Kozlov. Determination of Alloys of Antimony, Lead, Magnesium, and Cadmium in Bismuth 206

Ryndolov, D.I., and V.K. Belyayeva. Determination of Small Quantities of Bismuth in Alloys 217

Belyayeva, V.K., and V.K. Belyayeva. Determination of Lithium in Bismuth 221

Belyayeva, V.K., and V.K. Belyayeva. Polarographic Determination of Copper Alloys in Metallic Bismuth 224

Vlasovskiy, A.P., and V.K. Belyayeva. Spectrometric Determination of Alloys in Tungsten Compounds 227

Vlasovskiy, A.P., and V.K. Belyayeva. Methods of Spectral Determination of Alloys in Tungsten Compounds 236

Krasn. L.G., and V.K. Belyayeva. Methods of Spectral Determination of Alloys in Tungsten Compounds 239

Ryndolov, D.I., and V.K. Belyayeva. Method of Direct Determination of Lead in Alloys of Bismuth, Antimony, and Tin with the Aid of Oscillometric Polarography 265

Krasn. L.G., and V.K. Belyayeva. Method of Direct Determination of Oxygen and Nitrogen in Molypdenum and in Alloys by the Vacuum-Fusion Method 281

An Investigation of the Complex Formations of Zirconium SOV/78-4-8-18/43
and Hafnium With Tartaric Acid by Means of the Ion Exchange Method

The solution was buffered with NaClO_4 . By means of experiments it was found that in the case of a concentration of 2 - 1.3 mol hydrogen ions per liter no hydrolysis or polymerization takes place. The following is assumed to be the probable reaction of the complex formation of Zr and Hf with tartaric acid: $\text{Me}^{4+} + \text{H}_2\text{tart} \rightleftharpoons \text{MeH}_{2-n}\text{tart}^{4-n} + n\text{H}^+$. The distribution coefficient was computed and its dependence on the ratio $\frac{v}{m}$ (Table 3

v = volume of the solution, m = weighed portion of the cation exchanger) was determined. Moreover, the number of hydrogen ions released from tartaric acid in the complex formation was determined (Fig 5). The complex compounds of hafnium are more stable than those of zirconium (Tables 3, 4). A sorption of ions of the type MeHtart^{3+} or MeHtart^{2+} was not observed. Probably they do not take place due to steric factors or the weakening of the ionic charge in consequence of the linkage with the oxy groups of tartaric acid. There are 5 figures, 4 tables, and 38 references, 10 of which are Soviet.

SUBMITTED:
Card 2/2

April 16, 1959

5(2)

AUTHORS:

Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I.N. SOV/78-4-8-18/43

TITLE:

An Investigation of the Complex Formations of Zirconium and Hafnium With Tartaric Acid by Means of the Ion Exchange Method
(Izucheniye kompleksobrazovaniya tsirkoniya i gafniya s vinnoy kislotoy metodom ionnogo obmena)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1814-1826 (USSR)

ABSTRACT:

The investigation of the complex formations in aqueous solutions of zirconium and hafnium is rendered difficult by a strong tendency of these elements towards hydrolysis and polymerization. Therefore, the usual physico-chemical methods cannot be applied. For this reason the ion exchange method, the investigation of the equilibrium distribution of an element between two phases of a heterogeneous system are suggested. This relatively new method is described in detail on the basis of publication data.

The authors used Zr^{95} + Nb^{95} for their own experiments. In this case the softer β -radiation of Nb^{95} was absorbed by an aluminum filter, moreover Hf^{181} and the cation exchanger KU-2.

Card 1/2

5(4) SOV/78-4-2-39/40
 AUTHORS: Yermakov, A. N., Belyayeva, V. K., Marov, I. N., Chmutova, M. K.

TITLE: On the Use of Ion Exchange for Investigating the Composition of the Complex Oxalates of Pu(IV), Zr, and Hf (О применении ионного обмена к изучению состава комплексных оксалатов Pu(IV), Zr и Hf)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 2, pp 493-496 (USSR)

ABSTRACT: The complex compounds of plutonium, zirconium, and hafnium were investigated by means of the ion-exchange method by oxalic acid. The following formulas of the complexes were found: $[Pu(C_2O_4)_5]^{6-}$, $[Zr(C_2O_4)_5]^{6-}$, and $[Hf(C_2O_4)_5]^{6-}$. These complexes are formed if oxalate ions in the solution are in excess at pH 5.8-6.2. The distribution coefficients and the exchange constants of the three elements in these compounds are almost equal. The coordination number of the metal in oxalate complexes of plutonium (IV), zirconium, and hafnium is probably 6. There are 1 figure, 3 tables, and 13 references, 10 of which are Soviet.

Card 1/2

YERMAKOV, A.N.; BELYAYEVA, V.K.; MAROV, I.N.

Anion-exchange study of complex formation of zirconium and hafnium
with oxalate ions. Trudy kem.anal.khim. 9:170-178 '58.

(MIRA 11:11)

(Zirconium oxalate) (Hafnium oxalate) (Complex compounds)

BELYAYEVA, V. K., YERMAKOV, A. M., and MAROV, I. N.

"Possibilities of using anionites for the calculation of the constants of the stability of charged ions."

report presented at The Use of Radioactive Isotopes in Analytical Chemistry, Conference in Moscow, 2-4 Dec 1957
Vestnik Ak Nauk SSSR, 1958, No. 2, (author Rodin, S. S.)

ILLEGIBLE

ILLEGIBLE

ILLEGIBLE

ILLEGIBLE

BELYAYEVA, V. K.

Subject : USSR/Chemistry AID P - 1570
Card 1/1 Pub. 119 - 5/5
Authors : D. I. Ryabchikov and V. K. Belyayeva (Moscow)
Title : Methods for determination of humidity
Periodical : Usp. khim., 24, no.2, 240-248, 1955
Abstract : Methods of direct and indirect determination of humidity are reviewed, such as distillation, drying in a drying oven or desiccator, heating with infrared rays, and the gasometric and hydride methods. Two tables, 5 sketches, 78 references (23 Russian: 1908-1954)
Institution: None
Submitted : No date

M. I. Verduch

BELYAYEVA, V.I., kand.istorich.nauk, dotsent

Struggling for the fulfillment of the seven-year plan ahead
of time. Tekst.prom. 23 no.5:43-48 My '63. (MIRA 16:5)

1. Zaveduyushchiy kafedroy marksizma-leninizma Vsesoyuznogo
zaobnogo instituta tekstil'noy i legkoy promyshlennosti (VZITLP).
(Moscow-Textile industry) (Socialist competition)

ZARETSKIY, Vasil'y Vasil'yevich; BELYAYEVA, V.F., red.; PETROVA,
N.K., tekhn. red.

[Electrokymography] Elektrokimografiia. Moskva, Medgiz,
1963. 290 p. (MIRA 16:11)
(Electrokymography)

ZODIYEV, V.V., prof. (Moskva, G-270, 3-ya Frunzenskaya ul., d.4, kv.19);
BELYAYEVA, V.F., kand.med.nauk; BURKHMAN, A.I.; RABKIN, I.Kh.

X-ray diagnosis of aortic aneurysms. Vest.rent.i rad. 36 no.3:26-31
My-Je '61. (MIRA 14:7)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR (dir. - prof. I.G.Lagunova.), Gospital'noy khirurgicheskoy kliniki i Moskovskogo ordena Lenina meditsinskogo instituta (zav. kafedroy - ~~daystvitel'nyy~~ chlen AMN SSSR prof. B.V.Petrovskiy) i Moskovskoy gorodskoy polikliniki No.51 (glavnyy vrach Z.S.Rykhlova).
(AORTIC ANEURYSMS)

ZODIYEV, V.V., prof.; YAKHNICH, I.M., prof.; BELYAYEVA, V.F., nauchnyy
sotrudnik; TESLYA, T.A., nauchnyy sotrudnik

Clinical roentgenological changes in the cardiovascular system
due to ionizing radiation. Vest. rent. i rad. 35 no. 5:24-29
My-Je '60. (MIRA 14:2)

1. Iz rentgenodiagnosticheskogo otdela (zav. - prof. I.A.
Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdravookhraneniya
RSFSR (direktor - doktor med. nauk I.G. Lagunova).
(CARDIOVASCULAR SYSTEM) (RADIATION--PHYSIOLOGICAL EFFECT)

BELYAYEVA, V.F.

Significance of multistage radiokymography in the diagnosis of
limited myocardial diseases. Trudy TSentr. nauch.-issl. inst.
rentg. i rad. 10:97-101 '59. (MIRA 12:9)
(HEART--RADIOGRAPHY)

BELYAYEVA, V. F., Candidate Med Sci (diss) -- "The significance of multi-aperture roentgeno-kymography (continous and graduated) in the diagnosis of limited injuries to the myocardium". Moscow, 1959. 15 pp (State Sci Res Roentgenological-Radiological Inst of the Min Health RSFSR), 150 copies (KL, No 25, 1959, 139)

Belyaeva, V.F. EXCERPTA MEDICA Sec 15 Vol. 10/11 Chest Diseases Nov 57

2703. ZODIEV V. V. and BELYAËVA V. F. Radiodiagn. Dept. of Roentgenol. and Radiol. Inst., Moscow. *The problem of recognition of myocardial infarction (Russian text) VESTN. RENTGENOL. RADIODIOL. 1956, 4 (11-17) Tables 3 Illus. 8

150 cases of myocardial infarction were investigated by means of roentgenkymography. In 109 cases ECG and roentgenkymographic results coincided. By means of roentgenkymography the infarcts of the anterolateral wall of the left ventricle are found more often and are defined more easily than those of the posterior wall. The appearances of an infarct depend on its extent, depth and stage of repair. In the stage of formation of scar tissue frequently deformed crenations of varying amplitude are seen. In the stage of consolidation of the scar tissue, when the whole thickness of the myocardial wall has lost its function, paradoxical movements of the segment involved are seen (outwards protrusion in systole and invagination in diastole), proving the formation of an aneurysm. On the basis of many years of observation it is stated that normal function is never completely restored in the area of the infarct.

Nevskaya - Moscow (XIV, 15)

SHEKHTER, I.A., professor; BELYAYEVA, V.F.

Results of angiocardiology in the diagnosis of congenital heart defects. Vest. rent. i rad. no.2:62-67 Mr-Ap '55. (MLRA 8:5)

1. Iz rentgenodiagnosticheskogo otdela (zav. prof. I.A.Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. I.G.Lagunova).

(ANGIOGRAPHY,

angiocardiology, diag. of congen. cardiovasc. defects)

(CARDIOVASCULAR SYSTEM, radiography,

angiocardiology, diag. of congen. cardiovasc. defects)

(CARDIOVASCULAR DEFECTS, CONGENITAL, diagnosis,
angiocardiology)

L 11958-65

ACCESSION NR: AT 049102

Chromatographic equipment with a katharometer is indicated for substances with a boiling point above 40-45°C, those which dissolve easily in alkali or where low concentrations (less than 1%) have to be determined. This equipment is described and illustrated (chromatographic separation of complex mixtures from hexene dimethylation, or of piperylene in isoprene concentrates). The sensitivity threshold may be increased by using a thermo-chemical monitor (from the Kh-2M apparatus). Standard calibration with an artificial mixture is required for this equipment. The calibration coefficients were found to be constant for considerable variations of concentration and some modification of test conditions. This set-up was also used to determine admixtures of butylenes and methyl-ethyl ether in divinyl, of high purity and those of 1-butylene in isobutylene. The sensitivity of gas chromatography may be increased by concentration of impurities to a degree where they can be detected, or by increasing the sensitivity of the detector. A flame-ionization detector has been used at the NIMSR. This considerably facilitates control of product purity and makes possible determination of the basic polymerization centers; thus, e.g., cyclopentadiene was determined as one of the centers of catalytic isoprene polymerization, appearing as early as the dehydration stage. Orig. art. has 2 tables and 4 figures.

ASSOCIATION: None

Card

2/3

Submitted 16 Jul 64

L 11/255-5 NOV 1962/EP(a)/ZAP(j)/
EDC(a)/S(m)-1000/MK

Po-4/Pr-4/Pn-4 EDC(b)/SSD(a)/

ACCESSION NR. A4046192

B/0000/64/000/000/100/0115

AUTHOR: Baranov, V. G., Pankov, A. G., Khrush, E. G., Glazova, R. V.,
Belavova, V. P., Obeshchalova, N. V., Dolgova, N. A., Kravtseva, M. F.,
Mishina, A. V., Boylova, M. A.

TITLE: The use of gas chromatography in the production of monomers for synthetic rubber

SOURCE: Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po gazovoy khromatografii, 20. Moscow, 1962. Gazovaya khromatografiya. (Gas chromatography); trudy konferentsii. Moscow, Izd-vo Nauka, 1964, 109-115

TOPIC TAGS: gas chromatography, monomer production, two-stage chromatography, integral volume detector, katharometer, hexene demethylation, synthetic rubber, isopentane dehydration, flame ionization detector, isoprene polymerization

ABSTRACT: This is a survey of applied and applicable methods for chromatographic analysis. For example, two-stage chromatography for contact separation of the following components is described: H_2 , $N_2 + O_2$, CH_4 , C_2H_6 , C_3H_8 , C_4H_{10} , C_4H_8 and C_4H_6 . Integral volume detectors with autorecorders are applicable where no very low concentrations are involved (e.g. the mixture from the catalytic dehydration of isopentane).

Card 1/1

2

BELIAYEVA, V.B.

TMD for controlling anthracnose of cucumber in greenhouses.
Zashch. rast. ot vred. i bol. 6 no.11:32 N '61.

(MIRA 16:4)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva,
st. Perlovskaya, Moskovskoy obl.

(Cucumber—Diseases and pests)
(Anthracnose) (Disulfide)

KURBATOVA, R.A.; BELYAYEVA, V.A.

Procreative function of women after conservative myomectomy.
Kaz. med. zhur. no.2:60-61 Mr-Apr'63 (MIRA 16:11)

1. Otdeleniye operativnoy ginekologii (zav. - prof. M.V.
Dubnov) Instituta akusherstva i ginekologii AMN SSSR.

*

БЕЛЫЙ В. В.
RUKOSUYEV, Andrey Nikolayevich; BELYAYEVA, V.A., redaktor; MEDRISH, D.M.,
tekhnicheskii redaktor

[Flour and groats; chemistry and commercial guide] Khimii i tova-
rovedenie muki i krupy. Moskva, Gos. izd-vo torgovoi lit-ry, 1957.
379 p. (MIRA 10:4)

(Meal)

BELYAYEVA, V.A.

CHISTYAKOV, Fedor Maksimovich; MUDRETSOVA-VISS, Klavdiya Alekseyevna;
BELYAYEVA, V.A., redaktor; SUDAK, D.M., tekhnicheskii redaktor.

[Microbiology] Mikrobiologiya. Moskva, Gos.izd-vo trgovoi lit-
ry, 1957. 256 p. (MIRA 10:6)
(Microbiology)

BELYAYEVA, Valentina Aleksandrovna; DEMENT'YEVA, M.L., redaktor; MEDRISH,
D.M., tekhnicheskij redaktor

[Home use of corn in foreign countries] Pishchevoe ispol'sovanie
kukuruzy v zarubezhnykh stranakh. Moskva, Gos. izd-vo trgovoi
lit-ry, 1956. 103 p. (MLRA 9:9)
(Corn(Maize))

BELYAYEVA, V.A.

IKHIMOV, G.S., professor, redaktor; SPERANSKIY, V.G., professor, redaktor;
BELYAYEVA, V.A., redaktor; NAZAROV, B.A., redaktor; SUDAK, D.M.,
~~tekhnicheskij~~ redaktor.

[Commodity expert's manual of food products] Spravochnik tovaroveda
prodovol'stvennykh tovarov. Moskva, Gos.izd-vo trgovoi lit-ry.
Pt.2 [Milk and milk products. Edible fats and mayonnaise. Eggs and
egg products. Starch, sugar, honey. Confectionery. Alcoholic and
non-Alcoholic beverages. Tea and coffee. Spices, salt, tobacco.
Meat and meat products. Fish, fish products] Moloko i molochnye
tovary. Fishchevye zhiry i maionez. Laitsa i jaichnye tovary.
Krakhmal, sakhar, med. Konditerskie tovary. Alkogol'nye i bezal-
kogol'nye napitki. Chai i kofe. Prianiosti, sol', tabak. Miasi i
miasnye tovary. Ryba, rybnye tovary. 1955. 555 p. (MLRA 8:11)
(Food)

VYSHCHERPAN, Aleksandr Georgiyevich; MEL'MAN, Mikhail Yevdokimovich;
BELYAYEVA, V.A., redaktor; SUDAK, D.M., tekhnicheskiy re-
daktor; MEDRISH, D.M., tekhnicheskiy redaktor.

[Feed products; a commercial guide] Tovarevedenie predovol'-
stvennykh tevorev; uchebnik dlia shkol tergevege uchenichestva.
Moskva, Gos.izd-vo tergevei lit-ry, 1955. 380 p. (MIRA 9:5)
(Feed)

BELYAYEVA, V. A.

Dissertation: "Importance of Succulent Plant Fodder (Vegetables, Greens)
in the Feeding of Mink." Cand Biol Sci, Moscow Fur and Pelt Inst, 10 May 54.
Vechernyaya Moskva, Moscow, 2 May 54.

SO: SUM 284, 26 Nov 1954

L 16910-66

ACC NR: AT6030229

Table 1.

Steel or Alloy	Chemical composition, %										
	C	Si	Mn	Cr	Ni	Al	Ti	W	Mo	Ce	B
EI893	{ 0,08 —	{ 0,50 —	{ 0,50 —	{ 15,00 17,00	{ Base —	{ 1,20 1,60	{ 1,20 1,60	{ 8,00 10,00	{ 3,50 5,00	{ 0,025 —	{ 0,01 —
EP164	{ 0,08 —	{ 0,50 —	{ 0,50 1,00	{ 14,00 16,00	{ 22,00 25,00	{ — —	{ 1,40 1,80	{ 4,00 5,00	{ — —	{ 0,025 —	{ — —
EI725	{ 0,08 —	{ 0,50 —	{ 0,50 1,00	{ 14,00 16,00	{ 36,00 38,00	{ — —	{ 1,40 1,90	{ 4,00 5,00	{ — —	{ 0,025 —	{ 0,005 —

quantities of Ti(C, N) were found, but no traces of Me₂W-base Laves phase were detected. Orig. art. has: 3 figures and 5 tables. [TD]

SUB CODE: 11, / SUBM DATE: none/ ORIG REF: 002

Card 2/2 afs

L 46946-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AT6030229

SOURCE CODE: UR/2776/66/000/049/0116/0124

AUTHOR: Yakovleva, Ye. F.; Bogomolova, G. P.; Belyayeva, V. A.

55
B+1

ORG: none

TITLE: Phase analysis of EP164 and EI725 steels, and EI893 alloy

SOURCE: Msocow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii, Sbornik trudov, no. 49, 1966. Novyye metody ispytaniy metallov; khimicheskiy kontrol' v metallurgii (New methods in the analysis of metals; chemical control in metallurgy) 116-124

TOPIC TAGS: phase analysis, heat resistant steel, nickel chromium steel, nickel chromium alloy, titanium containing alloy, tungsten containing alloy, aluminum containing alloy/EP164 nickel chromium steel, EP725 nickel chromium steel, EI893 nickel base alloy

ABSTRACT: A method of phase analysis of EP164 and EI725 nickel-chromium steels, and EI893 nickel-base alloy (see Fig. 1) has been developed. In EI893 alloy, 18% of V'-phase was isolated after aging for 15,000 hr at 800C and about 20% of the same phase was isolated after aging for 20,000 hr at 750C. In both cases, significant

Card 1/2

BELYAYEVA, V.A.; ZAKHVALINSKIY, M.N.; ZIMINA, T.D.; DEMINA, T.N.;
KALASHNIKOV, P.V.; NAGORNAYA, Ye.F.; NAGORNIY, G.I.; TITOVA, T.P.

Adsorption properties of Gynyl' argillites. Trudy DVFAN SSSR.
Ser.khim. no.7:18-25 '65.

(MIRA 18:12)

BELYAYEVA, V.A.

Cathodic reduction of tetravalent tin. Zhur.fiz.khim. 39
no.10:2576-2578 O '65. (MIRA 18:12)

1. Tul'skiy politekhnicheskii institut. Submitted June 28,
1964.

1 34384-65

ACCESSION NR: AP5012447

destruction is the same for the different substances. If irradiation does not appreciably affect the recombination rate of the radicals (in the temperature range 240-300K) then two processes of first-order radical destruction may be effective. First, the radiation itself may not only generate radicals, but destroy them as well, with formation of hydrogen atoms and molecules with double bonds. Secondly, the large number of radicals may not be uniformly distributed through the substance but rather be in pairs and groups, leading to first-order destruction of the radicals and to weak temperature dependence of the reaction rate constant. The dominant process can be determined only by examining the final products of solid-phase radiolytic decomposition. The temperature dependence of the reaction rate constant does not obey the Arrhenius equation, Orig. art. has: 4 figures.

ASSOCIATION: Institut Khimicheskoy fiziki, Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 26Dec63

ENGL: 40

SUB CODE: 35, 41

NO REF SOV: 007

OTHER: 008

Card 2/2

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrooxidation - electroreduction of the system Mn^{3+}/Mn^{2+} .
Part 2. Zhur.fiz.khim. 37 no.1:197-201 Ja '63. (MIRA 17:3)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

Electrooxidation and...

S/076/63/037/001/021/029
B101/B186

[Mn^{2+}] and [Mn^{3+}]. If in addition partial or pure concentration polarization occurs, the maximum shifts with increasing polarization potential toward the increasing concentration of Mn^{3+} in the cathodic process and toward the increasing concentration of Mn^{2+} in the anodic process. Further, the maximum depends on temperature, e.g. at 40.5°C, $\Delta\varphi = 300$ mv, the cathodic maximum lies near $\sim 100 \mu a$, ~ 0.018 mole/l Mn^{3+} ; at 20.3°C, $\Delta\varphi = 300$ mv, it is positioned near $\sim 70 \mu a$, ~ 0.014 mole/l Mn^{3+} . Also, I is a linear function of the square root from the angular velocity of the electrode. There are 5 figures. ✓

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleev)

SUBMITTED: November 23, 1961

Card 2/2

S/076/63/037/001/021/029
B101/B186

AUTHORS: Gorbachev, S. V., Belyayeva, V. A.

TITLE: Electrooxidation and electroreduction of the system Mn^{3+}/Mn^{2+} .
II. Dependence of the rate of electrolysis on its composition

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 197 - 201

TEXT: The polarization curves of the system $Mn^{3+} - Mn^{2+}$ were plotted, Mn^{3+} being stabilized as pyrophosphate complex $[Mn(H_2P_2O_7)_2]^{3-}$. The measurements were made at constant total concentration $[Mn^{3+}] + [Mn^{2+}] = 0.024$ M, ratio $[Mn^{3+}]:[Mn^{2+}] = 7:1$ to $1:7$, and at a rotational speed n of the platinum disc electrode varying between 360 and 3000 rpm at $40.5^\circ C$, as well as with $n = 0$ at $20.3^\circ C$. The dependences amp. I (μA) versus $[Mn^{2+}]$ for the anodic process, and I versus $[Mn^{3+}]$ for the cathodic process, were plotted from the polarization curves. Results: In both anodic and cathodic process the curves I versus concentration pass through a maximum. In purely chemical polarization the maximum corresponds to the ratio 1:1 of the components

Card 1/2

BELYAYEVA, V.A.

New design of rotating disk electrodes. Zhur. fiz. khim. 36 no. 6:
1385-1387 Je'62 (MIRA 2207)

1. Moskovskiy khimiko-tekhnicheskiiy Institut Belyayeva.

KUZNETSOV, Ye.V.; SHERMERGORN, I.M.; BELYAYEVA, V.A.

Synthesis of polyesters based on trivalent phosphorus acids by
condensation polymerization at the interface. Trudy KKHTI no.30:
70-76 '62. (MIRA 16:10)

YAKOVLEVA, Ye.F.; BELYAYEVA, V.A.

Investigation of carbides precipitated from 12Kh2MFSR steel in
three different electrolytes. Sbor. trud. TSNIICHHM no.31:129-132
'63. (MIRA 16:7)

(Chromium-manganese steel--Analysis)
(Electrochemical analysis)
Carbides)

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrooxidation-electroreduction of complex di-trivalent iron salts. Part 2: Dependence of the rate of electrolysis on the composition. Zhur.fiz.khim. 36 no.8:1794-1797 Ag '62.
(MIRA 15:8)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleeva.

(Oxidation-reduction reaction) (Electrolysis) (Iron compounds)

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrolytic reduction-oxidation of the $Mn^{3+} - Mn^{2+}$ system.
Part 1. Zhur. fiz. khim. 36 no.1:229-233 Ja '62. (MIRA 16:8)

1. Khimiko-tekhnologicheskii institut im. D.I. Mendeleyeva.
(Manganese compounds) (Electrochemistry)

GORBACHEV, S.V.; BELYAYEVA, V.A.

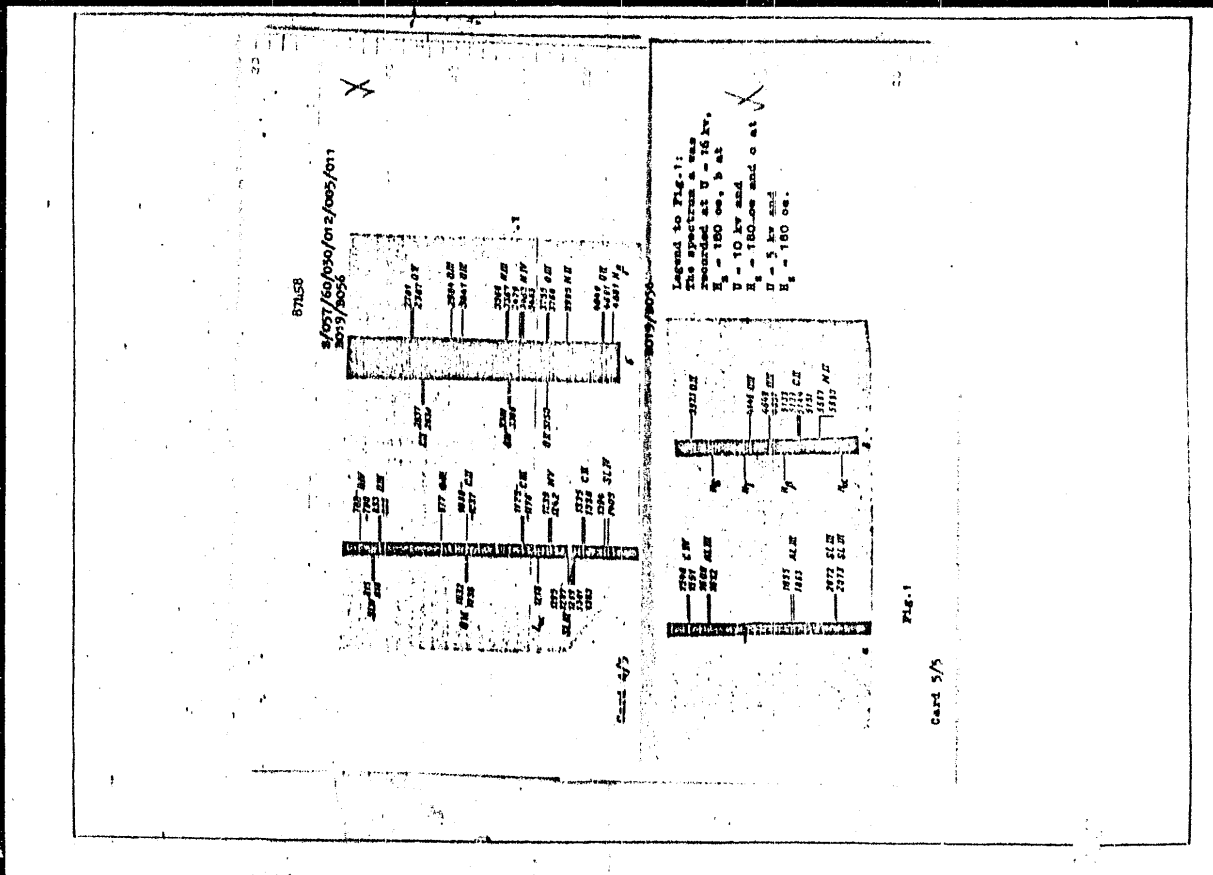
Electroöxidation - electroreduction of the system iodine - iodide.
Zhur.fiz.khim. 35 no.9:2158-2162 '61. (MIRA 14:10)

1. Khimiko-tekhnologicheskiv institut imeni D.I. Mendeleeva.
(Iodine) (Iodides)
(Oxidation-reduction reaction)

BELYAYEVA, V.A.; DRITS, V.A.; ZAKHVALINSKIY, M.N.; LARINA, V.A.; NAGORNAYA,
Ye.F.; NIKULINA, S.Ye.; NAGORNIY, G.I.; SEMIUSOVA, T.M.

Characteristics of clays of the Troshkovskiy deposits of the
Irkutsk Province. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un.
5 no.1:252-289 '61. (MIRA 16:8)

(Irkutsk Province--Clay--Analysis)



87138

5/09/60/090/07:2/005/011
2019/0056

34,2120 (1482,1502,1395)

ARTICLES

BY: ZAYDEL, A. M., Malyshov, G. M., Shreyder, Ye. Ye.,
Belyayeva, V. A., Gladushchak, V. I.,
Biden, V. V., Sokolova, L. V.

TITLE: Spectral Examinations With "Alife" Research Installation.
Character of the Character of the Spectrum and of the Ion
Temperature

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 12,
pp. 1422 - 1432

NOTE: The spectrum of the discharge was investigated within the range
2000-2000 Å. The spectrum of 350-2000 Å was recorded by a vacuum
spectrograph (500 lines/mm), the optical axis of the instrument was laid
in a radial direction. From 2000 Å to 5000 Å a quartz spectrograph was
used. Fig. 1 shows several spectra recorded by the instrument. For deter-
mining the ion temperature, the authors used the relation
 $T = 1.95 \cdot 10^{-4} (d\lambda/\lambda)^2$ (1), on the supposition that a Maxwell velocity

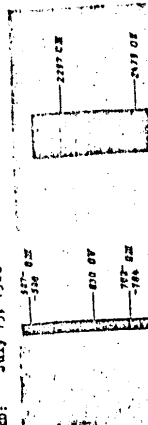
Card 1/5

distribution and a pure Doppler broadening of the spectral lines exists.
From the data concerning the temperature of the ion temperature obtained
harvest it follows that, in dependence on the section of the line,
from whose broadening the ion temperature is determined, the ion tempera-
ture varies within the range of $7.5 \cdot 10^4 - 15 \cdot 10^4$ K.
The calculated temperature value is the higher, the stronger the charge
of the ion according to whose line broadening the temperature has been
determined. This indicates an independent motion of the ions of dif-
ferent charges and a non-uniqueness of determining the plasma tempera-
ture from the Doppler broadening of the ion lines. The authors thank
B. P. Konstantinov, Ye. A. Kuznetsov, and M. P. Chayka for taking part in the work. There
are 6 figures, 4 tables, and 7 references: 5 Soviet and 2 US.

Card 2/5

ASSOCIATION: Fiziko-tekhnicheskii institut AS SSSR (Institute of
Physics and Technology of the AS USSR). Nauchno-
issledovatel'skiy institut elektrofizicheskoy apparatury
(Scientific Research Institute of Electrophysical
Apparatus)

SUBMITTED: July 15, 1960



Card 3/5

BELYAYEVA, V. A.

137-58-1-2104

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 285 (USSR)

AUTHORS: ~~Belyayeva, V. A.~~, Tarantsova, M. I., Glushko, Ye. I.

TITLE: Electrolytic Segregation of Iron from Titanium
(Elektroliticheskoye otdeleniye zheleza ot titana)

PERIODICAL: Sb. stud. rabot. Rostovsk. un-t, 1957, Nr 3, pp 45-48

ABSTRACT: An experimental verification of the segregation of Fe from Ti by electrolysis, using an Hg cathode at 2.5-3 amp and 5-6 v in 50-55 min time is presented. An artificial mixture of Fe and Ti containing 0.28-32.77 percent Ti was investigated. To determine the Ti in the Fe-Ti, 0.5 g of the latter is dissolved in 20 cc aqua regia, 2-3 drops of HF being added at the end of the period of solution, subsequent to which 20 cc H₂SO₄ (1:1) is added; evaporation follows until SO₃ vapors appear. The precipitant coming down under these conditions is dissolved in 5 percent H₂SO₄ and one then proceeds as described above.

Z. G.

1. Iron--Separation 2. Titanium--Separation 3. Electrolysis
--Applications

Card 1/1

KUPEYEV, Yu.; MIKHAYLOVA, Ye.; BELYAYEVA, V.; STRANTSEVA, Yu.

Alternating current generator of the PAZ-652 motortruck. Avt.transp.
39 no.6:40-43 Je '61. (MIRA 14:7)
(Motortrucks--Electric equipment)

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N.; MOGILEVSKIY, Ye.; SERKOV, A.; SMELKOV, G.; SNETKOV, N.;
SOROKIN, Ya.; SHIFRIN, L.

In memory of Vladimir Sergeevich Smurov, 1897-1965. Khim.
volok. no.2:78 '65. (MIRA 18:6)

BELYAYEVA, V.

MARKOV, M.V.; BELYAYEVA, V.; POPOVA, N.K.

Vegetation of the Volga and Kama bottomland waters within the
boundaries of the Tatar A.S.S.R. Uch.zap. Kaz.un. 115 no.5:111-152
'55. (MLRA 10:3)

(Tatar A.S.S.R.--Fresh -water flora)

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CA

DEFICIENCY AND EXCESS OF NUTRITIVE SUBSTANCES FOR CITRUS CROPS. V. Belyaeva. *Sovet. Subtropiki* 1939, No. 9, 31-5; *Chem. Zentr.* 1939, II, 3842; cf. C. A. 34, 29001. - A summary of the symptoms produced by the supplying of insufficient or excess amts. of N, P₂O₅, K, Fe, Mn, Zn, Cu, Mg, Ca and B to citrus trees. Methods of treating injuries resulting from a lack or excess of these elements are reported and data are given on the optimum doses.

M. G. Moore

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45																									
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ																									
15 Tests on the fertilization of citrus crops — V. Belyaeva <i>Soviet Subtropiki</i> 1939, No. 1, 50-1; <i>Chimie et Industrie</i> 42, 905; cf. <i>C. A.</i> 34, 1352².—Generally speaking, farm manure sufficiently enriches the soil in nutritive elements required for citrus plants: P, K, Ca, Mg and S. In certain cases it is advisable in addn. to spray the trees with Zn salt solns. when the Zn content of the soil is too low. From 0.9 to 1.1 kg. of available N is required per tree; but a considerable portion of this quantity is not used but is removed from the soil by atm. pptns., irriga- tion, etc. A. Papucan Conture.																									
ATA-51A METALLURGICAL LITERATURE CLASSIFICATION																									

1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
MATERIALS INDEX													COMMON VARIANTS INDEX												
<i>Handwritten:</i> 112 <i>Handwritten:</i> 112													<i>Handwritten:</i> 112												
Grating of citrus plants. V. Belyayeva. <i>Soviet Sub-tropiki</i> 1938, No. 11, 52-7; <i>Khim. Referat. Zhur.</i> 2, No. 4, 63(1939).—The max. amt. of sol. substances in fruits was produced by grafting to <i>Poncirus trifoliata</i> (from 9.8% to 12.62%) and the min. amt. by grafting to <i>Citrus limonia</i> (from 8.7% to 10.9%). The same law holds for citric acid. W. R. Henn																									
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Trudy Inst.ocean. 46:247-262 '61. (MIRA 14:6)
(Japan, Sea of--Diatoms, Fossil)

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